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### NOTICE OF ALLOWANCE AND FEE(S) DUE

Abbyy Software Limited P.O. Box 16146 Nicosia, CY2086 CYPRUS 08/05/2011

EXAMINER

PATEL, KANJIBHAI B

ART UNIT PAPER NUMBER

2624

DATE MAILED: 08/05/2011

|    |           | FILING DATE | FIRST NAMED INVENTOR   | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----|-----------|-------------|------------------------|---------------------|------------------|
| 10 | 0/657,008 | 09/08/2003  | Konstantin Anisimovich | 76.U12              | 1915             |

TITLE OF INVENTION: METHOD OF GRAPHICAL OBJECTS RECOGNITION USING THE INTEGRITY PRINCIPLE

| APPLN. TYPE    | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE   |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | YES          | \$755         | \$300               | \$0                  | \$1055           | 11/07/2011 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

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If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

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If the SMALL ENTITY is shown as NO:

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B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

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Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where n

| maintenance fee notifica  | ntions.  ENCE ADDRESS (Note: Use Biographics of the | lock 1 for any change of address)                                    | No<br>Fee<br>pag<br>hav<br>I h<br>Sta<br>ade   | Note: A certificate of mailing can only be used for domestic mailing Fee(s) Transmittal. This certificate cannot be used for any other accopapers. Each additional paper, such as an assignment or formal draw have its own certificate of mailing or transmission.  Certificate of Mailing or Transmission  I hereby certify that this Fee(s) Transmittal is being deposited with the States Postal Service with sufficient postage for first class mail in an addressed to the Mail Stop ISSUE FEE address above, or being transmitted to the USPTO (571) 273-2885, on the date indicated below |   |  |  |
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| CITROS  |  |  |  |   |   | (Depositor's name)   |  |
|   |  |  |  |   |   | (Signature)  |  |
|   |  |  |  |   |   | (Date)   |  |
| APPLICATION NO.   | FILING DATE  |  | FIRST NAMED INVENTOR   | R A   | TTORNEY DOCKET NO.                            | CONFIRMATION NO.   |  |
| 10/657,008  | 09/08/2003   | •  | Konstantin Anisimovich   | •   | 76.U12  | 1915   |  |
| APPLN. TYPE nonprovisional  | SMALL ENTITY YES   | ISSUE FEE DUE<br>\$755   | PUBLICATION FEE DUE \$300  | PREV. PAID ISSUE F  | EE TOTAL FEE(S) DUE                           | DATE DUE 11/07/2011  |  |
| EXAN  | MINER  | ART UNIT   | CLASS-SUBCLASS   | 7   |   |  |  |
| PATEL, KA   | ANJIBHAI B   | <u>2</u> 624   | 382-173000   | _   |   |  |  |
| "Fee Address" inc<br>PTO/SB/47; Rev 03-1<br>Number is required.  3. ASSIGNEE NAME A<br>PLEASE NOTE: Un                                    | AND RESIDENCE DATA<br>less an assignee is ident<br>th in 37 CFR 3.11. Comp   | " Indication form ed. Use of a Customer  A TO BE PRINTED ON a signee | registered attorney or<br>2 registered patent atte<br>listed, no name will be<br>THE PATENT (print or ty       | cle firm (having as a magent) and the names orneys or agents. If no eprinted.  Type)  Description:  Datent. If an assignee assignment.  | of up to name is 3is identified below, the c  | locument has been filed for  |  |
| Please check the appropr  | riate assignee category or   | categories (will not be pr   | rinted on the patent):   | Individual 🗖 Corp   | oration or other private gr                   | oup entity 🗖 Government  |  |
| 4a. The following fee(s) are submitted:  ☐ Issue Fee ☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies |  |  | b. Payment of Fee(s): (Ple A check is enclosed. Payment by credit ca The Director is hereb overpayment, to Dep | rd. Form PTO-2038 is<br>y authorized to charge  | attached. the required fee(s), any definition |  |  |
| a. Applicant claim  | <b>itus</b> (from status indicate<br>ns SMALL ENTITY stati   | us. See 37 CFR 1.27.   |  |   | ENTITY status. See 37 C                       |  |  |
| NOTE: The Issue Fee ar interest as shown by the   | nd Publication Fee (if req<br>records of the United Sta  | uired) will not be accepte<br>tes Patent and Trademark               | d from anyone other than<br>Office.  | the applicant; a registe  | red attorney or agent; or t                   | he assignee or other party in  |  |
| Authorized Signature  |  |  |  | Date  |   |  |  |
| Typed or printed name   |  |  |  | -   |   |  |  |
| submitting the complete   | d application form to the<br>ions for reducing this bu<br>Virginia 22313-1450. DC  | e USPTO. Time will vary  | depending upon the indi  | vidual case. Anv comi   | ments on the amount of ti                     | d by the USPTO to process)<br>ng gathering, preparing, and<br>me you require to complete<br>artment of Commerce, P.O.<br>for Patents, P.O. Box 1450, |  |

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|-----------------------------------|-----------------------|------------------------|---------------------|------------------|--|--|
| 10/657,008                        | 09/08/2003            | Konstantin Anisimovich | 76.U12              | 1915             |  |  |
| 13943 75                          | 13943 7590 08/05/2011 |                        |                     | EXAMINER         |  |  |
| Abbyy Software                    |                       | PATEL, KA              | NJIBHAI B           |                  |  |  |
| P.O. Box 16146<br>Nicosia, CY2086 |                       |                        | ART UNIT            | PAPER NUMBER     |  |  |
| CYPRUS                            |                       |                        | 2624                |                  |  |  |

DATE MAILED: 08/05/2011

### **Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)**

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

### **Privacy Act Statement**

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- 1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
- 2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- 6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- 9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

|  | Application No.   | Applicant(s)   |   |
|--|---|--|---|
|  | 10/657,008  | ANISIMOVICH ET AL.   |   |
| Notice of Allowability   | Examiner  | Art Unit   | _ |
|  | KANJIBHAI PATEL   | 2624   |   |
| The MAILING DATE of this communication apperall claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313  1.   This communication is responsive to AMENDMENT FILED | (OR REMAINS) CLOSED in<br>or other appropriate commu<br>GHTS. This application is s<br>and MPEP 1308. | this application. If not included nication will be mailed in due course. <b>THIS</b> | Э |
|  | , <u>, , , , , , , , , , , , , , , , , , </u>   |  |   |
| <ol> <li>The allowed claim(s) is/are <u>1 and 3-17</u>.</li> <li>Acknowledgment is made of a claim for foreign priority un</li> <li>a)</li></ol>   | nder 35 U.S.C. § 119(a)-(d) o   | or (f).  |   |
| 1. ☐ Certified copies of the priority documents have   | been received   |  |   |
| 2. Certified copies of the priority documents have   |   | n No   |   |
| 3. ☐ Copies of the certified copies of the priority doc  | • •   |  |   |
| International Bureau (PCT Rule 17.2(a)).   | samonto navo poem received  | The haddran stage application from the   |   |
| * Certified copies not received:   |   |  |   |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" on noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  4.  A SUBSTITUTE OATH OR DECLARATION must be subminification.  | IENT of this application. itted. Note the attached EXA  | MINER'S AMENDMENT or NOTICE OF   |   |
| 5. CORRECTED DRAWINGS ( as "replacement sheets") mus   | at be submitted   |  |   |
| (a) ☐ including changes required by the Notice of Draftspers   |   | ( PTO-948) attached  |   |
| 1) hereto or 2) to Paper No./Mail Date   | •   | ( ,  |   |
| (b) ☐ including changes required by the attached Examiner's Paper No./Mail Date  | s Amendment / Comment or  |  |   |
| Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in t  |   |  |   |
| DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT I  |   |  |   |
|  |   |  |   |
| Attachment(s)  | 5 D Nation of last  | isumaal Dataut Auguliaatiau  |   |
| 1. Notice of References Cited (PTO-892)  |   | formal Patent Application  |   |
| 2. Notice of Draftperson's Patent Drawing Review (PTO-948)   | Paper No./  | ımmary (PTO-413),<br>Mail Date   |   |
| <ol> <li>Information Disclosure Statements (PTO/SB/08),<br/>Paper No./Mail Date</li> </ol>   | /. 🔼 Examiner's   | Amendment/Comment  |   |
| <ol> <li>Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol>  | 8. <b>⊠</b> Examiner's<br>9. <b>□</b> Other   | Statement of Reasons for Allowance   |   |
|  |   | -  |   |

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#### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

### In the claims:

Replace claim 1 with the currently amended version.

**1.** (Currently amended) A method of object recognition <u>using a classifier</u> on a bit-mapped image, comprising:

identifying objects to be recognized on the bit-mapped image[,];

preliminarily assigning at least one graphical structure comprising more than one primary graphical unit to be used as a standard element constituent of each object to be recognized[,];

preliminarily describing each object to be recognized as a set of said standard elements of at least one type along with spatially parametrical correlations thereof[,]; performing the following steps:

search and identification of at least one standard element on the said-bit-mapped image[,];

selection of at least one standard element image for testing on as belonging to the object to be recognized[,]; and

setting up and testing a hypothesis about the object to be recognized on the basis of an image formed by aggregating all each selected standard element image taking into account spatially parametrical correlations thereof.

### Response to Amendment

2. Applicant's amendment filed 03/03/2011 has been entered and made of record. By this amendment, claim 2 is cancelled. Claims 15-17 are added new.

Claims 1 and 3-17 are pending in the application.

In response to applicant's submission of a amended abstract, the objection to specification has been withdrawn.

In response to applicant's amendment to claims 1 and 8, the minor claim objection has been withdrawn.

In response to applicant's cancellation of claim 2, the duplicate claim objection has been withdrawn.

In response to applicant's amendment to claims 1 and 3-14, the claim rejection under 35 USC 112, second paragraph has been withdrawn.

## Allowable Subject Matter

**3.** The following is an examiner's statement of reasons for allowance:

Claims 1 and 3-17 are allowed.

The closest prior art to Albertelli et al. (US 7,058,240 B2) disclose a method for generating classifier comprising: creating a database including location data for a first group of patterns from previously analyzed objects, dimensions for each of the

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previously analyzed objects, and validated previous assignments to one of the number of classes of each pattern from the first group of patterns from previously analyzed objects, normalizing each location datum belonging to one of the patterns from the first group of patterns from previously analyzed objects with respect to dimensions of a corresponding one of the previously analyzed objects, creating a normalized geometric grid normalized to dimensions of an object, deriving predetermined characteristic coordinate data from the normalized location data, and forming a number of probability distributions, based on the assignment of each pattern of the first group of patterns from previously analyzed objects to one of the classes, each one of the probability distributions assigning a frequency of occurrence of one of the predetermined characteristic coordinates in one of the classes to each one of the points in the normalized geometric grid.

Another closest prior art to Andel et al. (US 7,283,669 B2) disclose a method and computer program product for refining character segmentation in an optical character recognition system receiving as input a plurality of candidate objects. Each candidate object below a threshold character width is merged with another candidate object at one or more merge lines to form a composite object. The plurality of candidate objects are pre-classified to identify a plurality of composite objects and a plurality of character portions. Proposed split lines are determined for each of the composite objects. Regions are defined within each of the composite objects from the position of the merge and split lines. The defined regions are classified to obtain an associated score for each region. Complete region sets are defined for each composite object, each with an associated

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set ranking determined from the associated score of the regions comprising the set. The set having the highest ranking is selected. However, both prior art fails to teach or fairly suggest, singly or in combination at least the features of "search and identification of at least one standard element on the said-bit-mapped image, selection of at least one standard element image for testing on as belonging to the object to be recognized, and setting up and testing a hypothesis about the object to be recognized on the basis of an image formed by aggregating all each selected standard element image taking into account spatially parametrical correlations thereof" as recited in claim 1.

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4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### **Contact Information**

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kanji Patel whose telephone number is (571) 272-7454. The examiner can normally be reached on Monday to Thursday from 8 a.m. to 6:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samir Ahmed can be reached on (571) 272-7413 The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status

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information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/ Kanji Patel/

Primary Examiner, Art Unit 2624